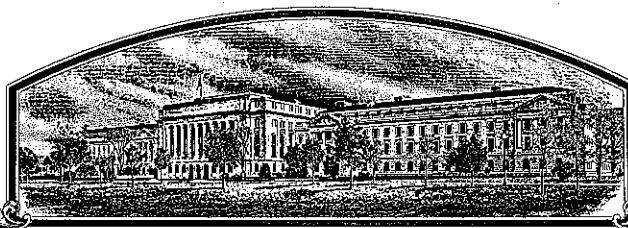


No.

9500031



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**Pioneer Hi-Bred International, Inc.**

Whereas, THERE HAS BEEN PRESENTED TO THE

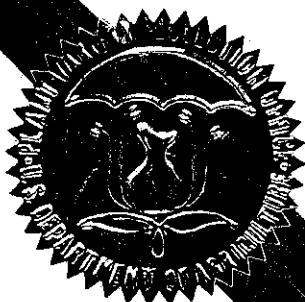
**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'9204'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirtieth day of January in the year of our Lord one thousand nine hundred and ninety-six.

Attest:

*Marsha A. Foster*

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*John A. Chittman*  
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE DIVISION

## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(INSTRUCTIONS ON REVERSE)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)

2. TEMPORARY DESIGNATION  
OR EXPERIMENTAL NO.3. VARIETY NAME  
9204

Pioneer Hi-Bred International, Inc.

4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP)

5. PHONE (include area code)

700 Capital Square

400 Locust St.

Des Moines, IA 50309

(515)270-3582

FOR OFFICIAL USE ONLY

PVPO NUMBER

9500031

F  
I  
L  
I  
N  
G

Date

NOVEMBER 8, 1994

Time

☐ A.M. ☒ P.M.

6. GENUS AND SPECIES NAME

Glycine max

7. FAMILY NAME (Botanical)

Leguminosae

8. CROP KIND NAME (Common Name)

Soybean

9. DATE OF DETERMINATION

September 1989

10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.)

Corporation

11. IF INCORPORATED, GIVE STATE OF INCORPORATION

Iowa

12. DATE OF INCORPORATION

1926

Filing and Examination Fee:

\$ 2,325.00

Date

OCTOBER 27, 1994

Certificate Fee:

\$ 300.00

Date

Dec. 27, 1995

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

John Grace  
7300 NW 62nd Ave.  
PO Box 1004  
Johnston, IA 50131-1004Mike Roth (copy)  
700 Capital square, 400 Locust St.  
Des Moines, IA 50309

PHONE (include area code):

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse)

a. ☒ Exhibit A, Origin and Breeding History of the Varietyb. ☒ Exhibit B, Novelty Statementc. ☒ Exhibit C, Objective Description of Varietyd. ☒ Exhibit D, Additional Description of Varietye. ☒ Exhibit E, Statement of the Basis of Applicant's Ownershipf. ☒ Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office 10/28/94g. ☒ Filing and Examination Fee (\$2,325) made payable to "Treasurer of the United States"15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See section 83(a) of the Plant Variety Protection Act) ☐ YES (If "YES," answer items 16 and 17 below) ☒ NO (If "NO," skip to item 18 below)

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

☐ YES ☐ NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?

☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?

☐ YES (If "YES," through☐ Plant Variety Protection Act☐ Patent Act. Give date.☒ NO

19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES?

☐ YES (If "YES," GIVE NAMES OF COUNTRIES AND DATES)☒ NO

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT [Owner(s)]

A. John Grace, III

CAPACITY OR TITLE

Soybean Research Coordinator

DATE

10/21/94

SIGNATURE OF APPLICANT [Owner(s)]

CAPACITY OR TITLE

DATE

Attachment: 9204 Soybean (March, 1994)

Attachment: 9204 Soybean (March, 1994)

Exhibit A: Variety 9204 evolved from a cross of Pioneer experimental 1901C45 with an F1 plant from Pioneer population number 5804. Pioneer cross 5804 evolved from a mating of Pioneer experimental 3426F07 with an F1 plant from Pioneer population number 5784. Pioneer cross 5784 evolved from a mating of Century 84 with an F1 plant from Pioneer population number 5663. Pioneer cross 5663 evolved from a mating of PRX325260 X PRX107132. Pioneer experimental 3426F07 evolved from a cross of GT1380 X A3127. PRX lines were developed by Curt Athow for Multi-race resistance to *Phytophthora megasperma* var. *sojae*.

It is an F5-derived variety which was advanced to the F5 generation by modified single-seed descent. The F6 progeny row of 9204 was grown in Iowa during the summer of 1989. Subsequently, 9204 has undergone four years of extensive testing and purification and has been observed by the breeder to be uniform and stable for all plant traits from generation to generation, with no evidence of variants.

The purification block was grown during 1992 and 101 sublines were bulked for increase. 8 acres of 9204 (breeders seed) were grown in Chile during winter season 1992. 210 acres of parent seedstock (foundation seed equivalent) were grown in 1993.

Exhibit B: Variety 9204 is most similar to variety AP2040. Both varieties have purple flowers, tawny pubescence and yellow seeds with black hila. However, AP2040 is susceptible to race 1 of *Phytophthora megasperma* var. *sojae* whereas 9204 is resistant to race 1.

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, MEAT, GRAIN & SEED DIVISION  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MARYLAND 20705

EXHIBIT C  
(Soybean)

OBJECTIVE DESCRIPTION OF VARIETY  
SOYBEAN (*Glycine max* L.)

NAME OF APPLICANT(S) <b>Pioneer Hi-Bred International, Inc.</b>	TEMPORARY DESIGNATION	VARIETY NAME <b>9204</b>
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) <b>700 Capital Square 400 Locust St. Des Moines, IA 50309</b>		FOR OFFICIAL USE ONLY PVPO NUMBER <b>9500031</b>

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g.,  ). Starred characters ★ are considered fundamental to an adequate soybean variety description. Other characters should be described when information is available.

1. SEED SHAPE:



1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)  
3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)

2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2)  
4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)

★ 2. SEED COAT COLOR: (Mature Seed)

1 = Yellow      2 = Green      3 = Brown      4 = Black      5 = Other (Specify) \_\_\_\_\_

3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

1 = Dull ('Corsoy 79'; 'Braxton')      2 = Shiny ('Nebsoy'; 'Gasoy 17')

★ 4. SEED SIZE: (Mature Seed)

Grams per 100 seeds

★ 5. HILUM COLOR: (Mature Seed)

1 = Buff      2 = Yellow      3 = Brown      4 = Gray      5 = Imperfect Black      6 = Black      7 = Other (Specify) \_\_\_\_\_

★ 6. COTYLEDON COLOR: (Mature Seed)

1 = Yellow      2 = Green

★ 7. SEED PROTEIN PEROXIDASE ACTIVITY:

1 = Low      2 = High

★ 8. SEED PROTEIN ELECTROPHORETIC BAND:

1 = Type A (SP1<sup>a</sup>)      2 = Type B (SP1<sup>b</sup>)

★ 9. HYPOCOTYL COLOR:

1 = Green only ('Evans'; 'Davis')      2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')  
3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')  
4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 268A')

★ 10. LEAFLET SHAPE:

1 = Lanceolate      2 = Oval      3 = Ovate      4 = Other (Specify) \_\_\_\_\_

## 11. LEAFLET SIZE:

☐ 21 = Small ('Amsoy 71'; 'A5312')  
3 = Large ('Crawford'; 'Tracy')

2 = Medium ('Corsoy 79'; 'Gasoy 17')

## 12. LEAF COLOR:

☐ 21 = Light Green ('Weber'; 'York')  
3 = Dark Green ('Gnome'; 'Tracy')

2 = Medium Green ('Corsoy 79'; 'Braxton')

## ★ 13. FLOWER COLOR:

☐ 2

1 = White

2 = Purple

3 = White with purple throat

## ★ 14. POD COLOR:

☐ 2

1 = Tan

2 = Brown

3 = Black

## ★ 15. PLANT PUBESCENCE COLOR:

☐ 2

1 = Gray

2 = Brown (Tawny)

## 16. PLANT TYPES:

☐ 11 = Slender ('Essex'; 'Amsoy 71')  
3 = Bushy ('Gnome'; 'Govan')

2 = Intermediate ('Amcor'; 'Braxton')

## ★ 17. PLANT HABIT:

☐ 3

1 = Determinate ('Gnome'; 'Braxton')

2 = Semi-Determinate ('Will')

3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

## ★ 18. MATURITY GROUP:

☐ 0 ☐ 5

1 = 000

2 = 00

3 = 0

4 = I

5 = II

6 = III

7 = IV

8 = V

9 = VI

10 = VII

11 = VIII

12 = IX

13 = X

## ★ 19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

## BACTERIAL DISEASES:

★

☐ 0Bacterial Pustule (*Xanthomonas phaseoli* var. *sojensis*)

★

☐ 1Bacterial Blight (*Pseudomonas glycines*)

★

☐ 0Wildfire (*Pseudomonas tabaci*)

## FUNGAL DISEASES:

★

☐ 1Brown Spot (*Septoria glycines*)Frogeye Leaf Spot (*Cercospora sojina*)

★

☐ 0

Race 1

☐ 0

Race 2

☐ 0

Race 3

☐ 0

Race 4

☐ 0

Race 5

☐ 0

Other (Specify)

☐ 0Target Spot (*Corynespora cassicola*)☐ 0Downy Mildew (*Peronospora trifoliorum* var. *manshurica*)☐ 0Powdery Mildew (*Microsphaera diffusa*)

★

☐ 1Brown Stem Rot (*Cephalosporium gregatum*)☐ 0Stem Canker (*Diaporthe phaseolorum* var. *caulivora*)

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

FUNGAL DISEASES: (Continued)

- ★ ☒ 1 Pod and Stem Blight (*Diaporthe phaseolorum* var. *sojae*)
- ☐ 0 Purple Seed Stain (*Cercospora kikuchii*)
- ☒ 1 Rhizoctonia Root Rot (*Rhizoctonia solani*)
- Phytophthora Rot (*Phytophthora megasperma* var. *sojae*)
- ★ ☒ 2 Race 1 ☒ 2 Race 2 ☒ 1 Race 3 ☒ 1 Race 4 ☒ 1 Race 5 ☐ Race 6 ☒ 1 Race 7
- ☒ 1 Race 8 ☒ 1 Race 9 ☒ 2 Other (Specify) 10, 13, 17

VIRAL DISEASES:

- ☒ 1 Bud Blight (Tobacco Ringspot Virus)
- ☒ 1 Yellow Mosaic (Bean Yellow Mosaic Virus)
- ★ ☒ 1 Cowpea Mosaic (Cowpea Chlorotic Virus)
- ☒ 1 Pod Mottle (Bean Pod Mottle Virus)
- ★ ☒ 1 Seed Mottle (Soybean Mosaic Virus)

NEMATODE DISEASES:

- Soybean Cyst Nematode (*Heterodera glycines*)
- ★ ☐ 0 Race 1 ☐ 0 Race 2 ☒ 1 Race 3 ☐ 0 Race 4 ☐ Other (Specify) \_\_\_\_\_
- ☐ 0 Lance Nematode (*Hoplolaimus Colombus*)
- ★ ☐ 0 Southern Root Knot Nematode (*Meloidogyne incognita*)
- ★ ☐ 0 Northern Root Knot Nematode (*Meloidogyne Hapla*)
- ☐ 0 Peanut Root Knot Nematode (*Meloidogyne arenaria*)
- ☐ 0 Reniform Nematode (*Rotylenchulus reniformis*)
- ☐ OTHER DISEASE NOT ON FORM (Specify): \_\_\_\_\_

20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

- ★ ☒ 1 Iron Chlorosis on Calcareous Soil
- ☐ Other (Specify) \_\_\_\_\_

21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

- ☐ 0 Mexican Bean Beetle (*Epilachna varivestis*)
- ☐ 0 Potato Leaf Hopper (*Empoasca fabae*)
- ☐ Other (Specify) \_\_\_\_\_

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	AP2040	Seed Coat Luster	AP2040
Leaf Shape	KENWOOD	Seed Size	AP2040
Leaf Color	AP2040	Seed Shape	KENWOOD
Leaf Size	AP2040	Seedling Pigmentation	AP2040

## 23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/POD
				CM Width	CM Length	% Protein	% Oil		
9204 Submitted	115	1	58			40.3	18.7	12	
AP2040 Name of Similar Variety	116	1.5	60			41.0	18.3	12	

## PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A<sub>2</sub> in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

## Exhibit D:

In Exhibit C we have identified 9204 as susceptible to bacterial blight, brown spot, pod and stem blight, rhizoctonia root rot, bud blight, yellow mosaic, cowpea mosaic, pod mottle, and seed mottle. This does not mean that we consider 9204 to be worse than other varieties of similar maturity in reaction to these challenges. Rather, we do not consider 9204 to be immune to them. Therefore, we have chosen to be conservative and have identified 9204 as "susceptible".

Variety 9204 is an early group II variety. If group II maturities are divided into tenths, the relative maturity of 9204 is 2.0.

## Isozyme information for 9204.

<u>ACO2</u>	<u>ACO3</u>	<u>ACO4</u>	<u>ACP</u>	<u>DIA</u>	<u>ENP</u>	<u>IDH1</u>	<u>IDH2</u>	<u>MDH</u>	<u>MPI</u>	<u>PGM</u>	<u>PHI</u>
2	1	1	A	B	A	1	1	B	A	1	1

## Exhibit E.

Variety '9204' was originated and developed by plant breeders from whom, by agreement, Pioneer Hi-Bred International has obtained exclusive rights to protect and market variety '9204'. No rights to such invention, discovery, or development are retained by the plant breeders or by any other party.

LIBRARY  
PIONEER HI-BRED INTERNATIONAL  
DES MOINES, IOWA 50319



**Agricultural  
Marketing  
Service**

Science  
Division

Plant Variety Protection Office  
NAL Building, Room 500  
10301 Baltimore Blvd.  
Beltsville, MD 20705-2351

OCT 27 1995

October 23, 1995

**Dr. John Grace  
Pioneer High-Bred International  
7300 NW 62nd Avenue  
PO Box 1004  
Johnston, Iowa 50131-1004**

Dear Dr. Grace:

**SUBJECT: PVP Application No. 9500031, SOYBEAN, '9204': Exhibit E, Statement of the Basis of the Applicant's Ownership**

Before final recommendation for issuance can be made for '9204', certain information needs to be supplied regarding the statement of the basis for ownership. The rights of an applicant to a variety, for plant variety protection purposes, are derived from the original breeder. It is thus necessary to determine the rights that original breeder would have had (or has) under the Plant Variety Protection Act had he or she desired to apply for plant variety protection.

Please supply responses to the following questions:

**NOTE:** It is not requested nor are you required to reveal the identity of the original breeder.

**Is the applicant the original breeder<sup>1</sup>?**

Yes ☒ No ☐

**If no, please answer the following:**

**a. If original rights to variety were owned by individual(s):**

Is (are) the original breeder(s) a U.S. national(s)? Yes No

**If no, give country**

**b. If original rights to variety were owned by company:**

Is the original breeder a U.S. based company?      Yes      No

**If no, give country**

The requested information must be received in the Plant Variety Protection Office on or before **November 24, 1995**, or the application will be deemed abandoned. A request for an extension of time to supply the information may be made on or before the deadline specified above. Such a request must specify the amount of time desired, provide an explanation of why

<sup>1</sup>Original breeder may be individual company who directed final breeding. See PVPA §41(a)(2) for definition.



**The Agricultural Marketing Service  
is an agency of the  
United States Department of Agriculture**